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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,585	12/17/2001	Charles W. Bucey	00-849	2858

719 7590 10/28/2003

CATERPILLAR INC.  
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PATENT DEPT.  
PEORIA, IL 616296490

EXAMINER

JACKSON, ANDRE K

ART UNIT PAPER NUMBER

2856

DATE MAILED: 10/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application N .

10/023,585

Applicant(s)

BUCEY ET AL.

Examiner

André K. Jackson

Art Unit

2856

new

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-8, 10, 12-17, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-8, 10, 12-17, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 2-8,10,12-17,19 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Bucey et al.

Regarding claim 10, Bucey et al. disclose an "Apparatus and method for testing a recuperator cell for an air leak" which has a platform defining a first end and a second end, a first surface of the platform extends between the first end and the second end a first support portion being attached to the first surface and a second support portion being spaced from the first support portion and each being attached to the first surface, a pair of sealing mechanisms, a pump being connected to the sealing mechanisms, a monitoring system being connected to the platform, the sealing mechanisms, the reservoir and the pump and a

readout station (Column 2, lines 1-30, Figures 4 and 5). It is inherent in leakage detection to have a predefined acceptable decay rate and a predefined rejection rate. This would be needed since one would have to establish a threshold in order to detect when the threshold has been exceeded.

Regarding claim 2, Bucey et al. disclose where the monitoring system includes a plurality of sensors (Column 2, lines 1-30).

Regarding claim 3, Bucey et al. disclose where the plurality of sensors operational sensing the pair of sealing mechanisms being in the closed or testing position (Column 2, lines 1-30).

Regarding claim 4, Bucey et al. disclose where the monitoring system has a plurality of safety devices operatively attached (76).

Regarding claim 5, Bucey et al. disclose where the readout station has a visual indicator (78).

Regarding claim 6, Bucey et al. disclose where the readout station visually marks a result of the tested recuperator core on the core (Claim 4).

Regarding claim 7, Bucey et al. disclose where the readout station indicates a decay rate of the recuperator core (Claim 5).

Regarding claim 8, Bucey et al. disclose where the plurality of sensors define that the pair of sealing mechanisms are at the open or non-testing (Column 1, lines 40-60).

Regarding claim 12, Bucey et al. disclose where the step of monitoring a rate of decay defines an operational core and a failed core (Columns 1 and 2).

Regarding claim 14, Bucey et al. disclose positioning the recuperator core in a test stand; positioning a seal member in the sealing relationship with one of the donor inlet end and the recipient inlet end and positioning an other of the sealing member in sealing relationship with one of the donor outlet end and the recipient outlet end forming a reservoir and defining a closed or testing position; actuating a controller applying one of a pressure and a vacuum to the reservoir; monitoring a rate of decay of the pressure and the vacuum and displaying the rate of decay (Column 2 and claim 5) and having a guard member position about an "OD" of the recuperator core (Column 1, 54-65).

Regarding claim 13, Bucey et al. disclose where the sealing member in sealing relationship with one of the donor inlet and the recipient inlet end and an other of the sealing member in sealing relationship with one of the donor outlet end and said recipient outlet end are disengaged from the closed or testing position into an open or non testing position and the test core being positioned in one of an operational core position and a failed core position (Columns 2 and 3).

Regarding claim 15, Bucey et al. disclose including positioning a plurality of sensors being operatively connected to the pair of sealing

mechanisms and the controller and the plurality of sensors sensing the proper position of the pair of sealing mechanisms relative to an open or non testing position and the closed or testing position and communicate a signal to the controller before applying one of the pressure and the vacuum to the reservoir (Column 2).

Regarding claim 16, Bucey et al. discloses including the plurality of sensors includes a plurality of safety devices operatively attached to the controller (76).

Regarding claim 17, Bucey et al. disclose the step of displaying the decay rate includes a readout station (Claim 14).

Regarding claim 19, Bucey et al. disclose where the readout station printing a decay rate on the recuperator core (Column 4).

Regarding claim 20, Bucey et al. disclose where the readout station indicating the decay rate defines as a loss of one of a pressure and vacuum per unit of time (Claim 15).

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to André K. Jackson whose telephone number is (703) 305-1522. The examiner can normally be reached on Mon.-Thurs. 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703) 305-

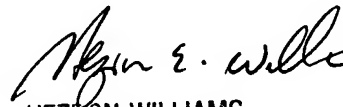
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4705. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A.J.

October 20, 2003



HEZRON WILLIAMS  
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